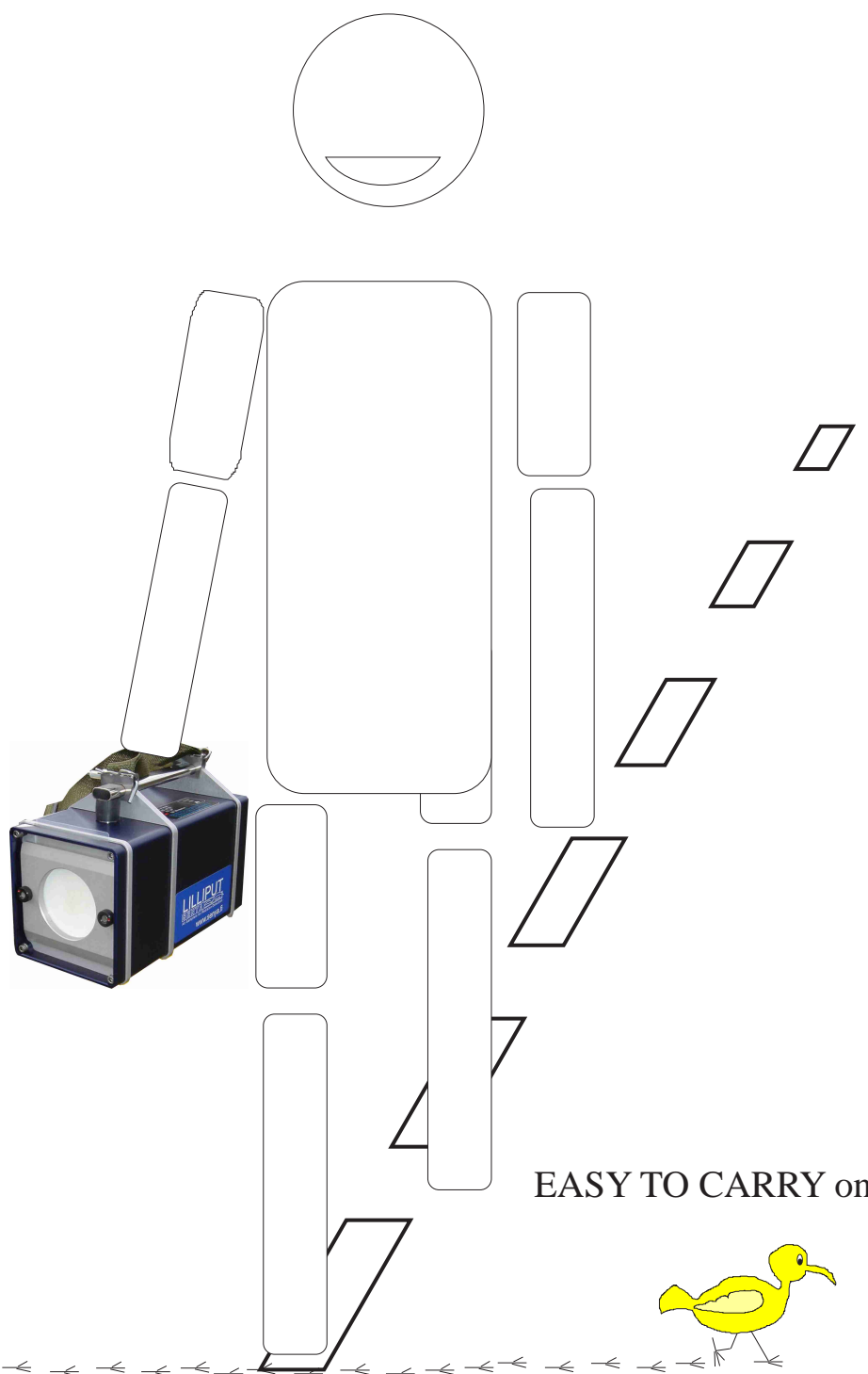


PORTABLE



Purpose: Collecting particles on filter
Where: Nuclear power plants, under ground mines, in emergency situations etc. where fast response and independent operations are needed.

Portable battery operated sampler from SENYA Oy



GENERAL SPECIFICATIONS FOR SENYA Oy LILLIPUT SAMPLER

SIZE	300 x 175 x 165mm (l x h x w)
WEIGHT	approx. 10kg
MATERIAL	Anodized aluminum
FILTERS	Ø110mm, Ø100mm, standard filters System STUK Ø77mm laminated filters With adapter Ø47mm filters With adapter activated carbon filters
	Battery status indicator, 3-colour LED Automatic switch OFF when battery power too low Timer function NOT yet available Sampler can be run from 230V/50Hz electrical net with Battery Charger if Battery Pack is low:

HOWEVER BATTERY PACK MUST BE IN NORMAL POSITION IN NET RUNNING.

VOLUME FLOW	(Ø90 active area)	Battery duration
	Ø110, Ø100mm glass fiber 12m3/h	approx. 1,5h
	STUK Ø77mm 10m3/h	“ 1,5h
	9m3/h	“ 2,5h
	7m3/h	“ 4h

CONTROLS	3-stage flow speed control
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DISPLAY	Pressure difference	Pascal
	Airflow	m3/h
	Cumulative volume	m3
	Cumulative time	hh:mm:ss

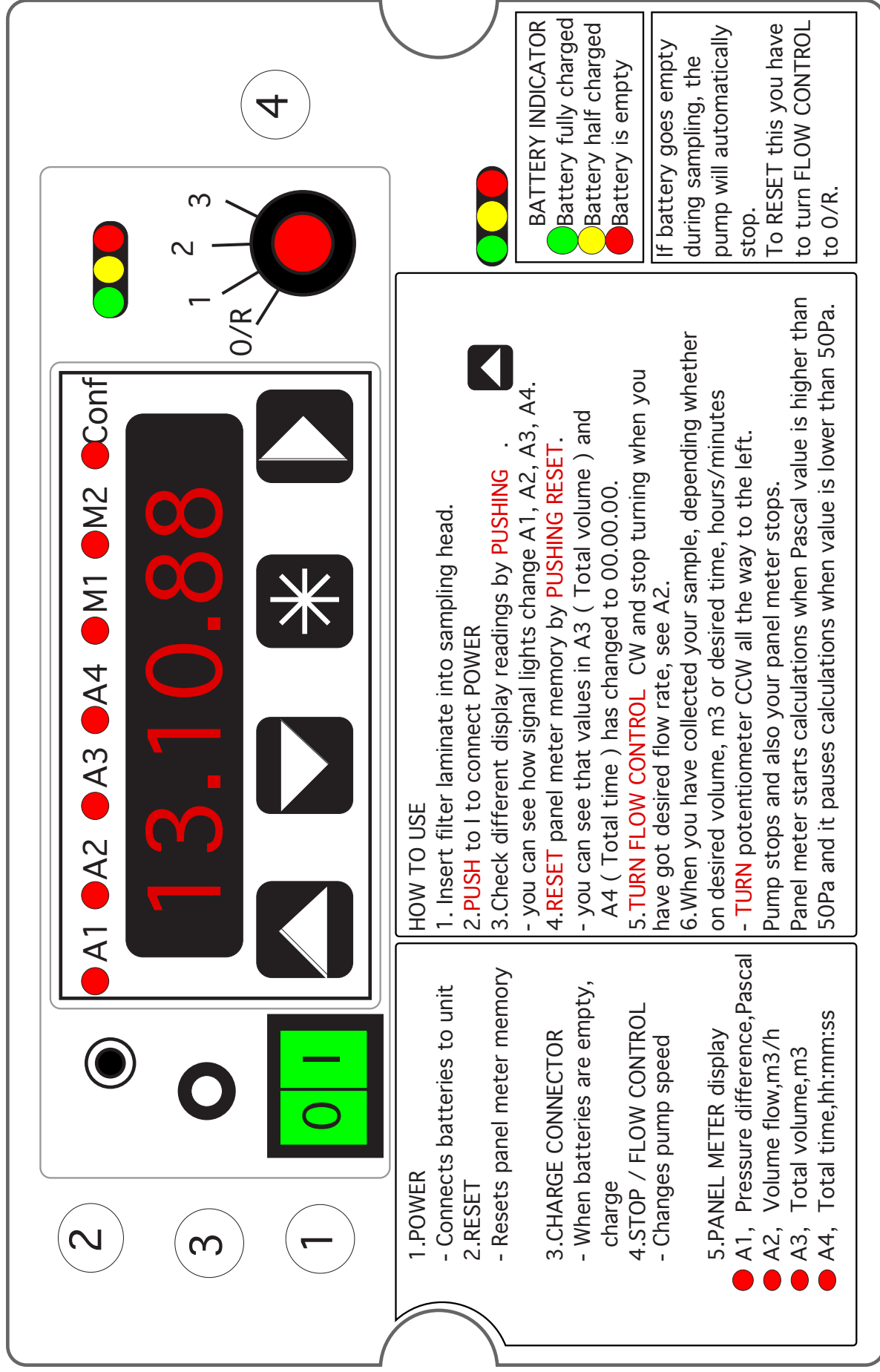
MEASURING PRINCIPLE	Pressure difference over orifice, no moving parts
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DATA STORAGE	Cumulative volume,	One sampling
	Cumulative time,	One sampling

POWER SUPPLY	24VDC, 2 x 12V/7Ah closed lead acid batteries in series Max current used 4,5A
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BATTERY CHARGER	24VDC, 5A, 3-step charger with 3-colour LED indicators
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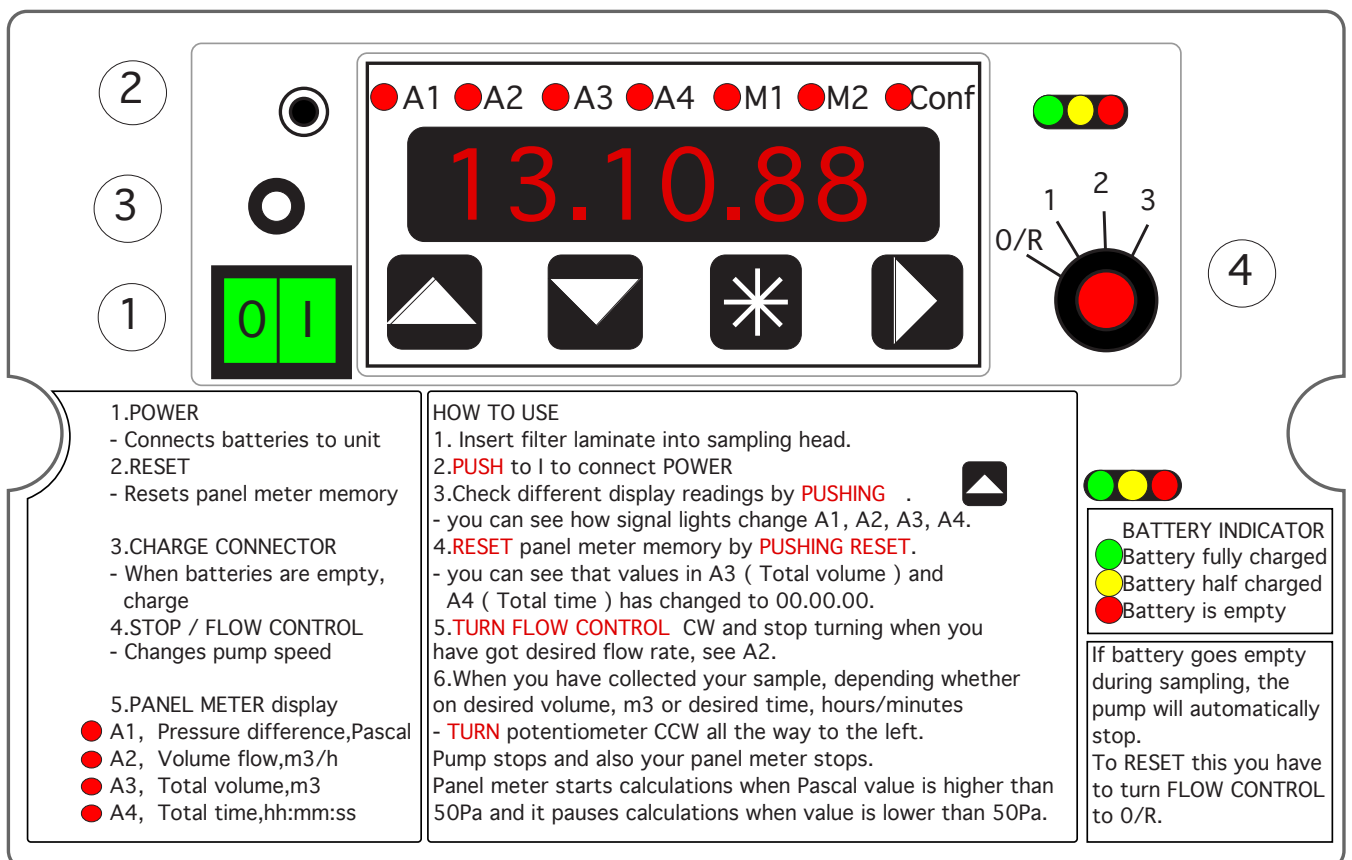
ACCESSORIES	Tripod Carrying belt Delivery case
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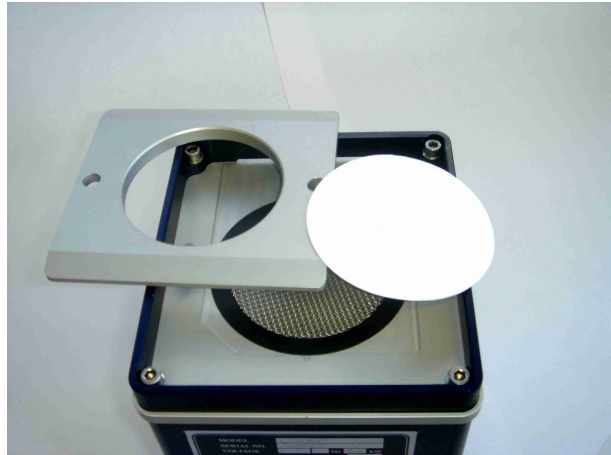


HOW-TO-USE LILLIPUT

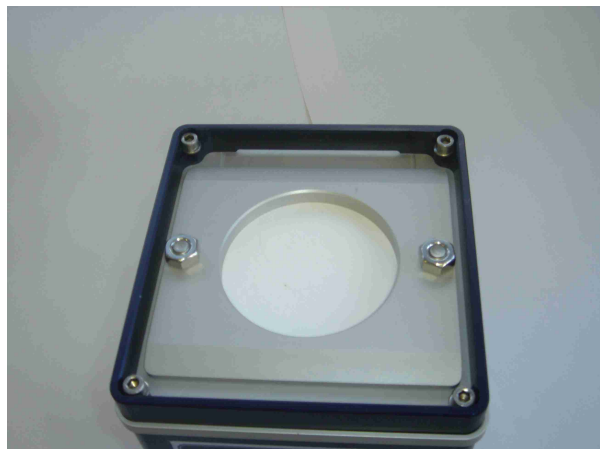


1. Charge battery by connecting charger to connector.
When 3-step charger light has turned to green then battery is full.
When not in use keep battery fully loaded.





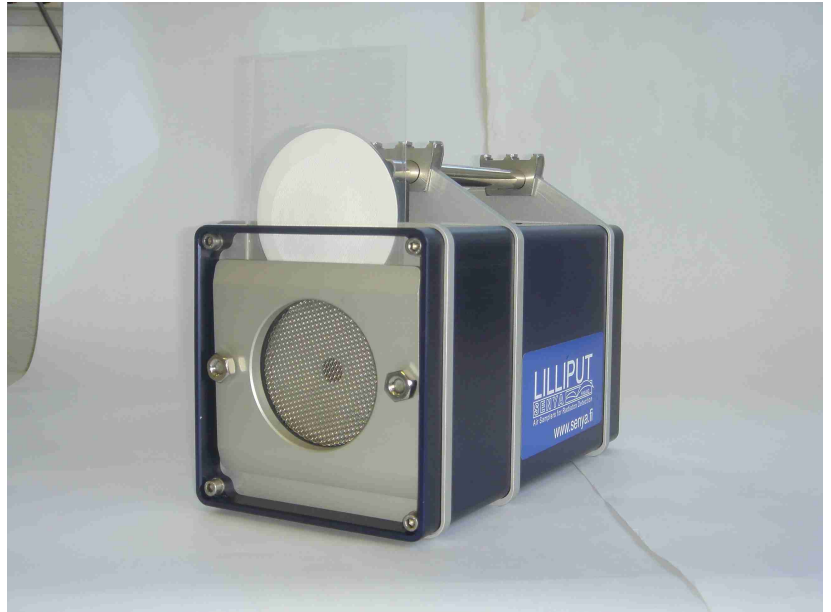
2. Open filter cover
Insert filter into sampling head.
you can use Ø100mm round filters
or you can use filter laminates.
Close filter cover.



You can:

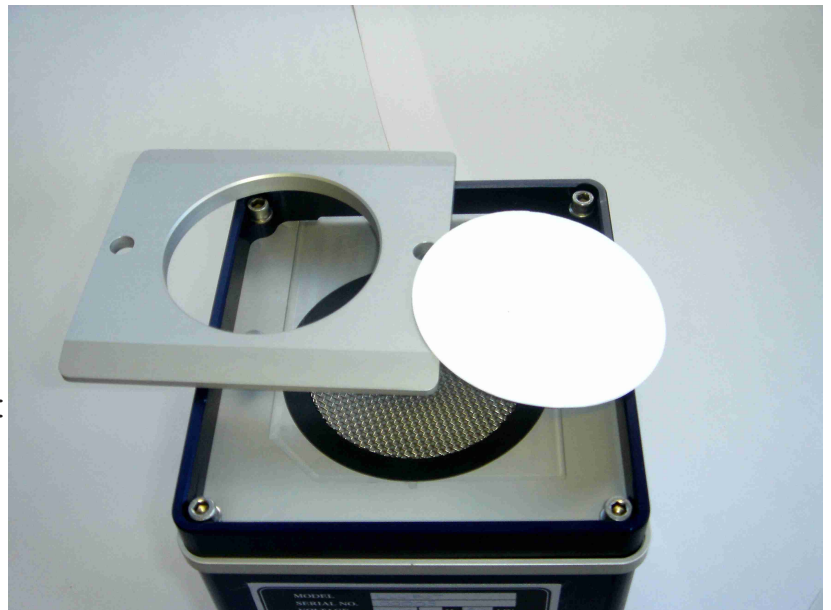
Use LILLIPUT laminated filters:

- max diameter Ø90mm
- min diameter Ø47mm



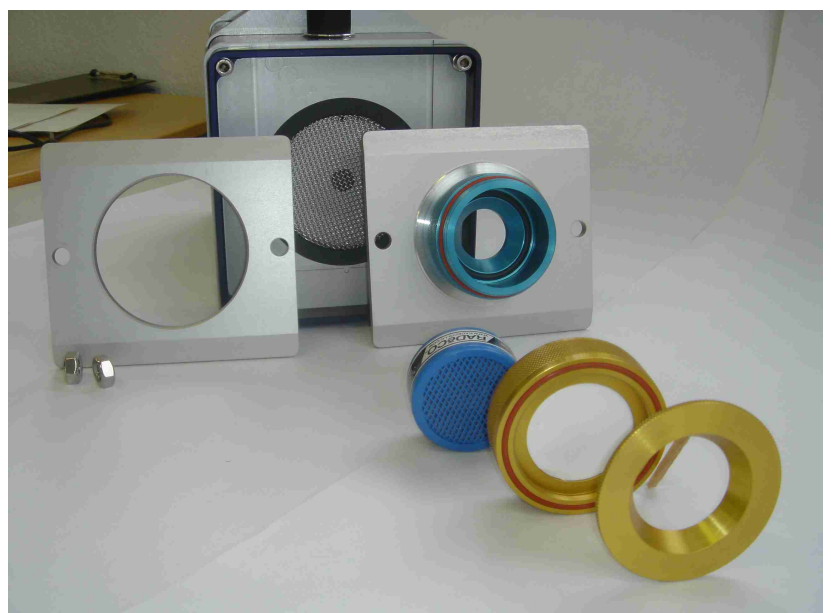
Use standard round filters:

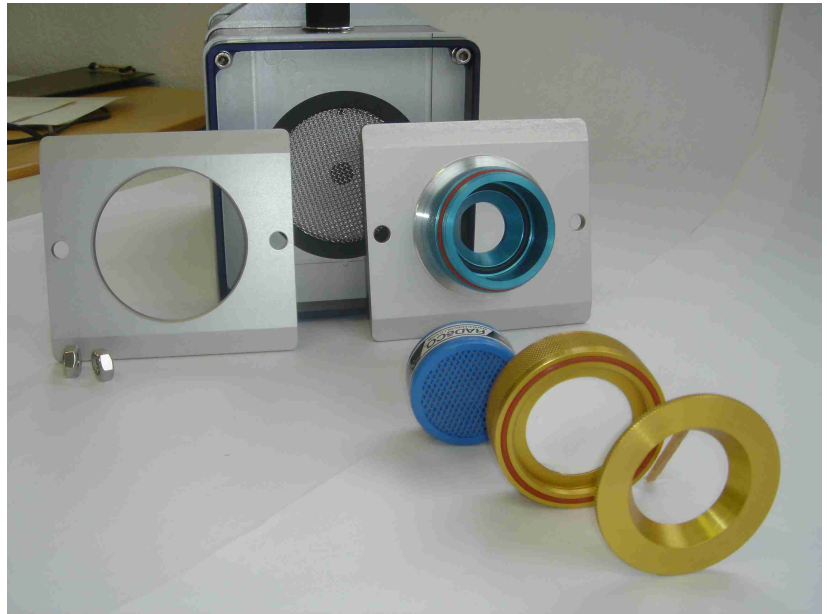
- max diameter Ø110mm
- min diameter Ø100mm



Use with adapter:

- Ø47mm filters
- carbon cartridges
-





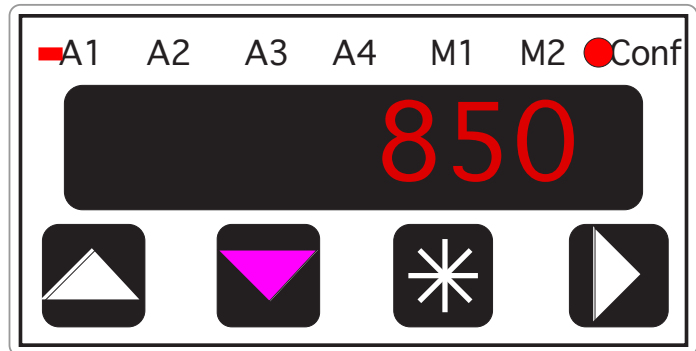
Adpter for Ø47mm geometry consist of similar base plate as normal filter plate.

It has a adapter part where you can fit Ø47mm activated carbon cartiridges; this adapter is based on HI-Q company elements and fits their cartridges. In the same adapter there is also a place for Ø47 particle filters.

CODING OF SIGNAL LIGHTS IN PANEL METER

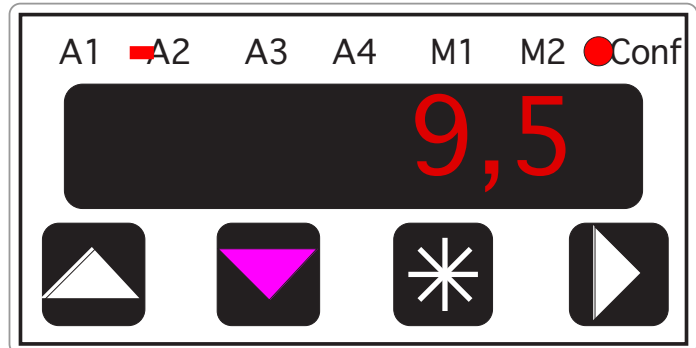
A1= Pressure difference on orifice:
Pascal

Pascal



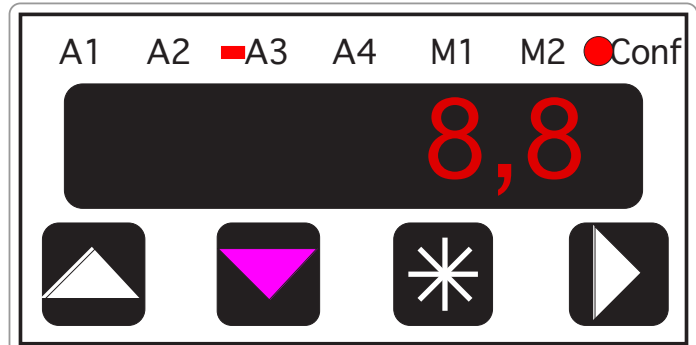
A2= Air flow in: m³ / h

m³/h



A3= Total air volume in: m³

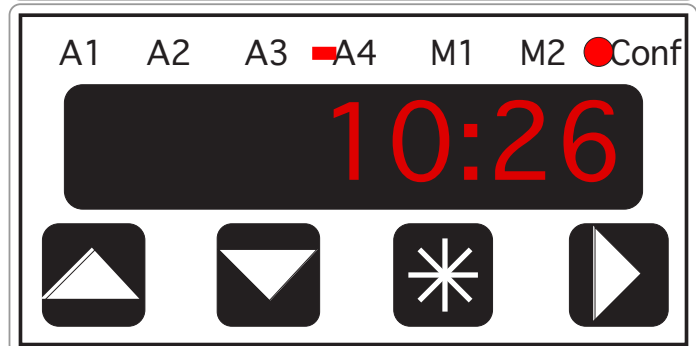
m³



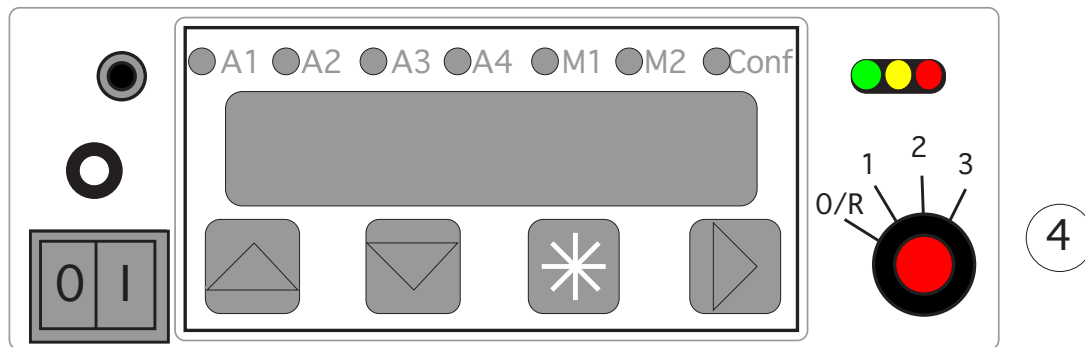
A4= Total time in: hh:mm:ss

Move on by pressing downward
arrow. You can also move by
upward arrow.
This can be done also during
sampling.

hh:mm:ss



FLOW SPEED CONTROL



 BATTERY INDICATOR

 Battery fully charged

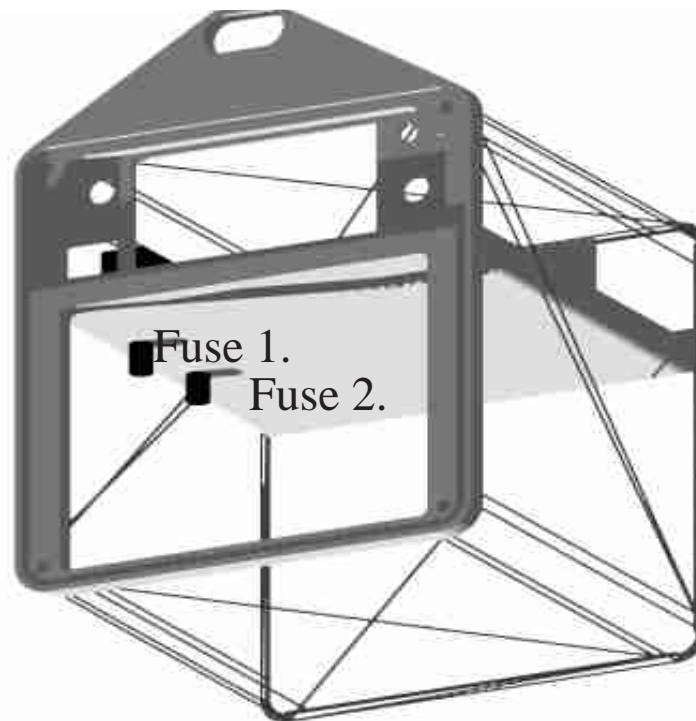
 Battery half charged

 Battery is empty

If battery goes too low during sampling, the pump will automatically stop.
To RESET this you have to turn FLOW CONTROL to 0/R.

ATTENTION! IF BATTERY PACK IS SWOLLEN, CHANGE IT IMMEDIATELY.

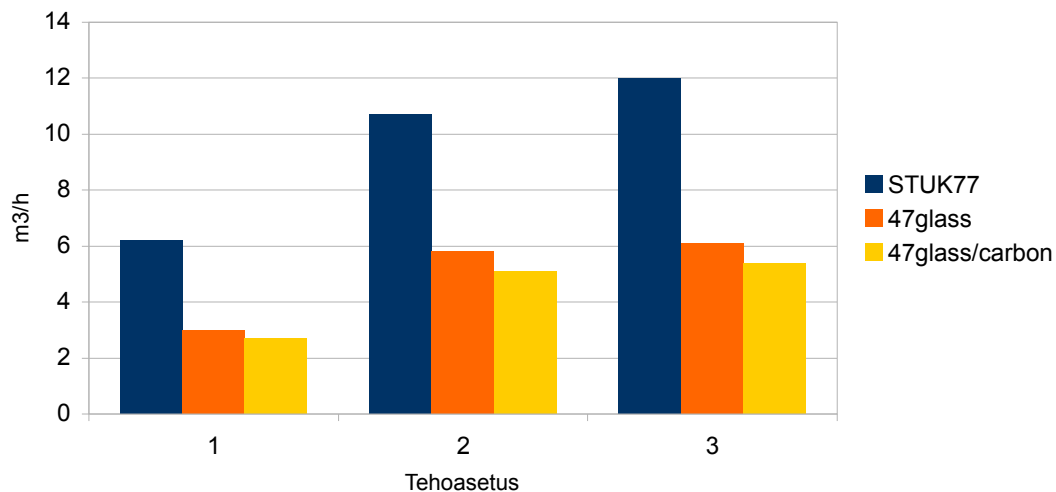
EQUIPMENT SELF PROTECTION



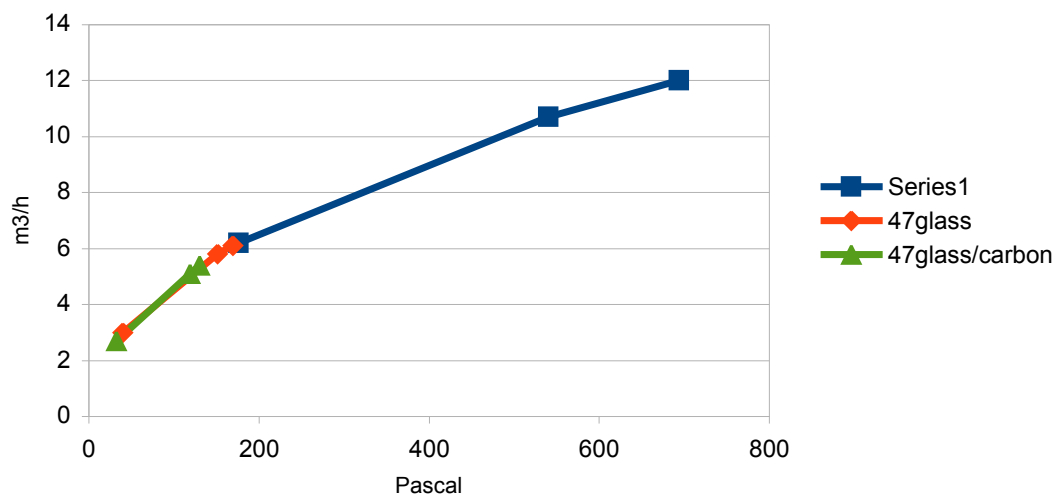
1. AUTOMATIC FUSE, cuts OFF charging in over current situation:
 - check what caused over current; possible cause -broken battery
2. AUTOMATIC FUSE, cuts OFF if too much current is drawn from battery
 - check wha caused over current; possible cause short circuit in electronics
3. Automatic cut OFF if pump warms too much, let pump cool
 - intake may be fully blocked, example too filled filter.
4. If battery voltage drops under 20,3V pump is cut OFF; load battery.

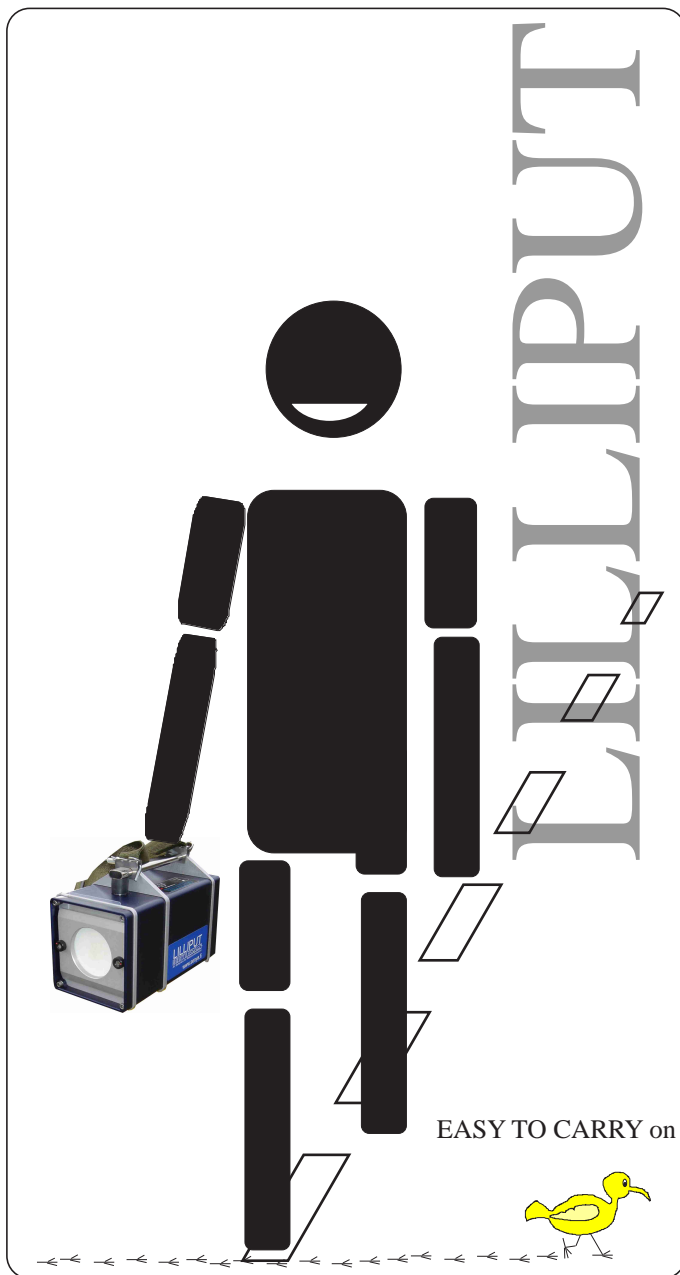
	LILLIPUT TESTING				
	Date:05.04.2011		Serial nr:STUK2011-001		Person: M. Terho
STUK77		47glass fiber		47glass/carbon	
Pascal	m3/h	Pascal	m3/h	Pascal	m3/h
176	6.2	40	3	32	2.7
540	10.7	151	5.8	119	5.1
694	12	169	6.1	130	5.4
	STUK77	47glass fiber	47glass/carbon		
	m3/h	m3/h	m3/h		
	6.2	3	2.7		
	10.7	5.8	5.1		
	12	6.1	5.4		

LILLIPUT STUK2011-001



LILLIPUT STUK2011-001





Purpose: Collecting particles on filter
Where: Nuclear power plants, under ground mines, in emergency situations etc. where fast response and independent operations are needed.

Portable battery operated sampler from SENYA



Use LILLIPUT

- outdoors, but not in heavy rain
- on heavy duty tripod
- or use shoulder carrying belt
- or on some level surface



Operation interface is simple and easy to use:



You can:

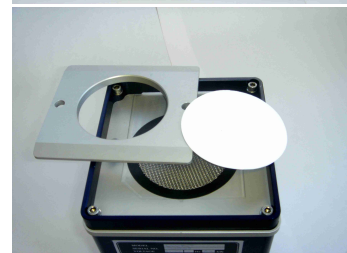
Use LILLIPUT laminated filters:

- max diameter Ø90mm
- min diameter Ø47mm



Use standard round filters:

- max diameter Ø110mm
- min diameter Ø100mm



Use with adapter:

- Ø47mm filters
- carbon cartridges
-





